



Mazak Corporation Apprenticeship Program offers Kentucky Tech students chance of a lifetime

In a nation being strangled by staggering unemployment, the Mazak Corporation in Florence, Kentucky is taking necessary measures to find skilled and educated employees.



Skilled jobs just don't go away - the problem is finding skilled people



Finding *skilled workers with a good work ethic* was never a problem for Mazak, the leading CNC machine tool manufacturer in the world according to its website (www.mazakusa.com). But, times have changed for many state and nationwide manufacturing companies– including Mazak. To retain its competitive edge, company leadership has done something to help correct the situation by creating the “Mazak Apprenticeship Program.” There are signs of real success.



“The idea of jobs going somewhere else is not at all acceptable,” said Paul Rayburn, Mazak assistant assembly manager and career employee of 33 years. “American manufacturing is the best in the world. And as an employer, we are willing to make the investment for skilled employees – but, we need a seed. We need to recruit people who have basic technical skills. *And, this means looking at all the options – including secondary vocational technical programs.*”



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According to Rayburn, this is the first time since the company opened its doors in Florence, Kentucky as a small manufacturing operation in 1974 that they have had to put up a “welders needed sign” in the front yard. The plant is Mazak’s only manufacturing facility in the United States. And, skilled employees in all production areas are critical to its commitment of manufacturing excellence. Of the approximately 800 employees, roughly half work in production.



Rayburn:

“This is a new age. The industry has changed and the workforce has changed. We were always able to pluck the best from the existing workforce, but this is no longer the case because the workforce pool we hired from no longer exists.

“We have learned that we must train our own employees and bring in the necessary resources for continued growth and success.”

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Mazak leadership understands many welders nationwide are at or near retirement age creating a real shortage. However, there are also many skilled jobs in the company that require workers to understand the practical and theoretical foundations of mechanical and electrical engineering, hydraulics, pneumatics, motor controls, CNC machining and programmable logic controls.

A skilled worker shortage causes companies to react because it affects the bottom line. Mazak officials are tackling the challenge and fully support the company's apprenticeship program to "grow our own skilled employees," said Rayburn. "Manufacturing is now more than just manual labor, it has evolved into the need for a more highly skilled and educated worker."

When discussion about the apprenticeship program began, Rayburn and Angie Herolaga (Mazak human resources) looked at many avenues to recruit quality individuals. They specifically tapped the Mechatronics program at Gateway Community and Technical College-Boone Campus as a resource.

The team devised a screening process for applicants to determine what type of worker a person will be. Among several indicators, it includes looking at work history and using the ACT WorkKeys® test. Any person interested in becoming a Mazak apprentice must meet a certain cut score. According to Rayburn, the WorkKeys® test has its benefits: "it helps the company determine what people might be good at doing; it is EEO acceptable; it is a measurable instrument that takes away ambiguity; and it covers a broad spectrum."

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Another solution to the problem has been to work in conjunction with the secondary career and technical education system in order to recruit skilled talent. “That’s new for us,” says Rayburn. “We need a certain type of person. We have nothing against band, football, or any of the other sports that students participate in during high school – but, what can we do with these types of kids if they don’t have the skills we need? Funding and support of technical programs is critical because it is now necessary to grow an interested and skilled workforce from a young age.”

The KY Tech school district is now part of the discussion in the recruitment of students. Why? The types of programs at KY Tech area technology centers are beneficial to Mazak. “We need more technical programs that will lead a person into a good, well-paying manufacturing job - not less programs,” said Rayburn.

Mazak has reached out to local and state workforce investment agencies, the Kentucky Community and Technical College System, and Kentucky Tech area technology centers. Both Rayburn and Herolaga are now making personal visits to KY Tech open houses, speaking to students in KY Tech programs, and working with KY Tech instructors to identify individuals who can become part of Mazak’s skilled workforce.

Mike Kindred

OCTE deputy executive director:

“We believe KY Tech is a valuable pipeline for Mazak to recruit quality employees armed with basic technical skills and a good work ethic. We are in a position to positively promote the apprenticeship program throughout our statewide system of 53 area technology centers, and through our workforce investment partners. This will raise awareness of the opportunity for students to put the technical skills they learned to work with a great company.”



According to the Mazak apprenticeship brochure, the following apprenticeship programs are currently available:

Assembly Technician

- 3-year program
- Assemble machines
- Use precision measuring technology

Electrical Technician

- 4-year program
- Operate programmable logic controllers
- Install electrical systems
- Wire electrical components



Runoff Technician

- 4-year program
- Inspect finished products
- Test technological components
- Troubleshoot high tech issues

CNC Technician

- 4-year program
- Set up machine tools
- Operate cutting edge equipment
- Inspect part output
- Conduct tool selection

Mazak apprenticeship benefits:

- Full-time employment
- \$13.19/hour starting wage rate
- Routine wage increases
- Paid vacation/personal/sick days
- Health, vision, dental, short and long-term disability and life insurance, and Section 125 Flexible Spending Plan
- On-the-Job training
- 100% paid tuition
- College credit from Gateway Community and Technical College

The following pages spotlight KY Tech students who have been accepted into the Mazak Apprenticeship Program.



Student Spotlight: Rufus McIntosh, 18 years old Kentucky Tech-Boone Co. ATC sheet metal program

A Motocross rider who has suffered 63 broken bones, McIntosh considered a professional career in the sport after high school. Instead, he chose to sign up for the Mazak Apprenticeship Program – a decision he believes will provide a great future for him because of the opportunity he has been given. As an afterthought, McIntosh relays he recently visited a friend who had a motorcycle accident that left him injured - another reason he believes he made the right decision.

Rufus describes himself as someone who was “not interested in school” and “really didn’t make great grades” prior to enrolling in Kevin McKenney’s sheet metal program. He says McKenney made him “work hard and that meant staying busy.” Being in the sheet metal class helped him learn to enjoy school because it was like “a work setting.”

“I learned twice as much because there was a purpose. It wasn’t just doing problems,” said McIntosh. “I knew I had to make certain grades to stay in Mr. McKenney’s class and my grades came up to A’s and B’s. From the beginning of the year to the end of the year, there was a big difference in me. My training helped my work ethic and I now have an understanding of metals.”

*Graduated from
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June 2011*

*Began working
at Mazak on a
full time trial
basis:
June 6, 2011*

*Began full time
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Program:
August 15, 2011*



Photo, top left (l to r): Garry Harper, KY Tech-Boone Co. ATC principal and McIntosh. "We are excited about working with Mazak and feel we are a good fit because we teach basic technical skills in all of our programs," said Harper. "We are proud of how Mr. McIntosh has performed. It is a testament to his work ethic and technical ability. It also speaks volumes about how Mr. McKenney conducts his sheet metal class."

Photo, middle (l to r): McIntosh, Tim Friedly, final assembly/shipping group leader; and Derek Newman, co-worker. "Rufus McIntosh catches on quick. He is knowledgeable and has a good work ethic," said Friedly. "He will be in management in the future."

Photo, far right: McIntosh conducting a final inspection of the Mazatrol Matrix Nexus machine.



McIntosh found out about the Mazak Apprenticeship Program because of a visit to his class by Angie Herolaga, Mazak human resources. It was the company's way of recruiting from the second tier – high school. She informed the students about the benefits of the program. Upon filling out the apprenticeship paperwork and successfully completing the WorkKeys® test, McIntosh was hired for the summer on a trial basis. He began working at Mazak June 6 with a starting salary of \$11.00/hour. He worked together with others in a team and they helped him understand how to do various technical jobs using his skills.

Rufus McIntosh – Mazak Apprentice

“I have a better outlook on life because of this opportunity,” said McIntosh. “Being part of something like this is great and I feel like I’m helping every day instead of just being in the way.”

McIntosh completed his probationary period in good standing. As a result, he was accepted as a Mazak apprentice. On August 15, his salary was raised to \$13.19/hour (a \$2.19 per hour raise in just two months). He also has full benefits that include health and dental, and he has been enrolled at Gateway Community and Technical College – all paid for by Mazak.



“I just picked up my books for school and it was over \$300,” said McIntosh. “I didn’t have to pay for any of it.”

McIntosh believes that before he became part of the Mazak Apprenticeship Program he really didn’t have a plan. “If I hadn’t been enrolled in the sheet metal class, I would never have found out about Mazak,” says McIntosh. “Paul (Rayburn) gave me the opportunity of a lifetime and I have a whole future planned out now. I think I can make a great living.”



Student Spotlight: Zach Howell, 18 years old J.D. Patton electrical technology program

Before the Mazak Apprenticeship Program opportunity, Howell worked at fast food restaurants. Now, he is working toward a bright future in a career track. He's using the skills he learned in Tom Pitts' electrical technology program – he's working full time – he's making good money – and, he's glad he has been given this opportunity to become more a skilled and educated individual.

During part of his high school career as a KY Tech student, Howell went to class at Gateway Community and Technical College where he was enrolled in the Mechatronics program. When he found out about the Mazak Apprenticeship Program, he applied. He even earned the "Gold" standard on the WorkKeys® test. It paid off for him.

On June 6, Howell began working for Mazak on a full time trial basis making \$11.00/hour. Because of his work ethic and performance, he has been granted the opportunity to officially become a full time Mazak apprentice. On August, 15 his salary was raised to \$13.19/hour which represents a \$2.19 raise in just two months.

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Zach Howell at his work station.

“There is great value in this apprenticeship program because it is not only a learning experience, it is preparing me for the rest of my life,” said Howell. “I’m lucky. Not many people get this opportunity. I expect to retire from here and my ultimate goal is to become head of production.”

Regarding his former KY Tech instructor Tom Pitts, Howell had this to say, “Mr. Pitts preached having a good work ethic. He told us what it meant and what was expected. He talked to us about always doing our best.”

Howell also has a great deal of admiration for Paul Rayburn. “He holds us to a high standard and makes sure we are the best we can be. We know he cares about us.”



Student Spotlight: Thomas Reckers, 20 years old J.D. Patton electrical technology program

While in high school, Reckers was an electrical technology student under the direction of former Kentucky Tech instructor Tom Pitts. He always enjoyed being in the program because it was “hands-on.”

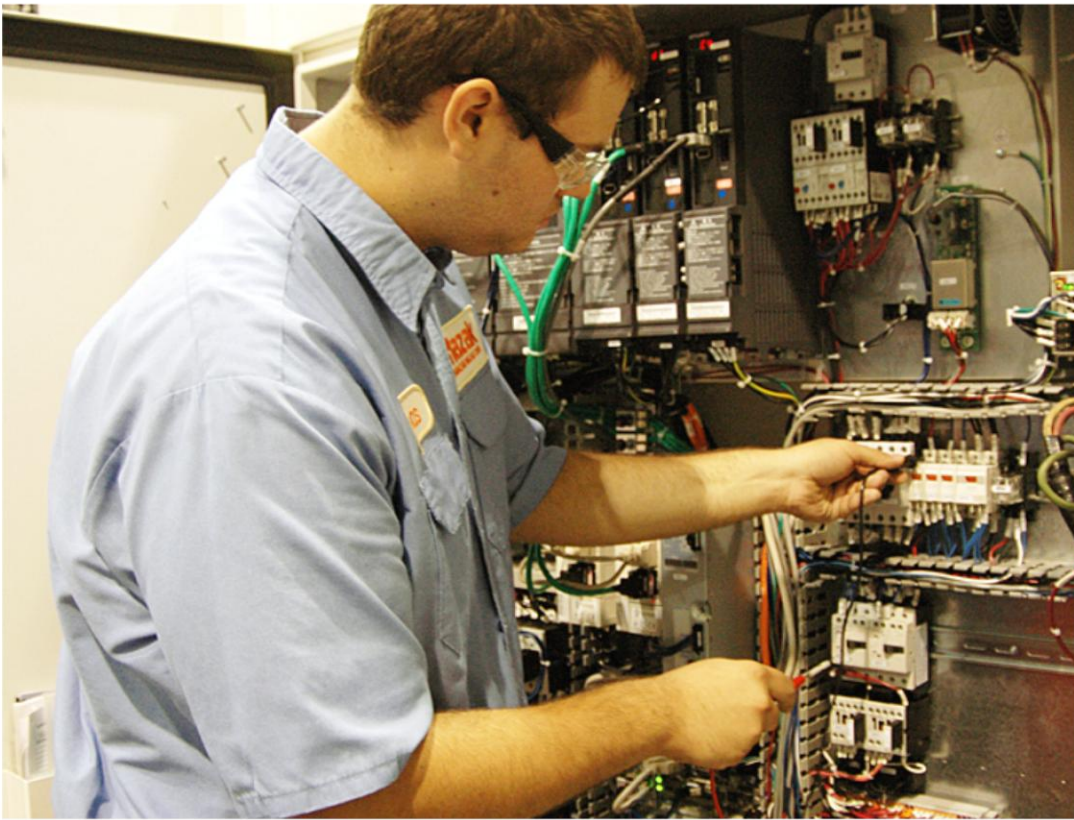
“I liked being in Mr. Pitts’ class because we could build things,” said Reckers. “It was right down my alley and I learned a lot.”

Reckers also earned 6 hours of dual credit through Gateway Community and Technical College – Boone Campus (GCTC-BC) while he was enrolled in his Kentucky Tech program. He found out about the Mazak Apprenticeship Program and applied through GCTC-BC. According to Reckers, “the big pay-off” was when he passed the test and met the criteria to be accepted as an apprentice. A year ago, he started out making \$12.50/hour. At the end of August 2011, Reckers will make \$13.55/hour.

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Thomas Reckers



Reckers has been involved in the Mazak Apprenticeship Program since August 2010 and knows that he made the right decision when he applied. And yes, Paul Rayburn is a major reason he feels that he has been successful.

“Paul is like a father figure to me. From the first day I started here, he taught me

me the basics. He is a boss, a mentor, someone to look up to, and someone I can respect. I don’t think I would be any happier working anywhere else at this point in my life.”

In the final analysis, Reckers realizes that if he had not been in Mr. Pitts’ class, “I wouldn’t be at Mazak in the apprenticeship program at all. I have learned so much and been in a position to better myself. I have earned a living, gone to school, bought my own car, and all this means freedom.”

Rayburn:

"We want the apprentices to come on board with us. I'm perfectly willing to take the risk of moving forward because I can move backward."

"Part of my preaching includes the 3 A's – attendance, ability, and attitude. You can sometimes find good workers, but you can't always find good employees. There is a difference."

With all the partnership efforts taking place and the initial successes of the three KY Tech apprentices, the good news is - Mazak can use KY Tech as a pipeline to recruit individuals with basic technical skills. The good news for KY Tech students is they have a direct pathway into the manufacturing workforce if certain criteria is met. And, all of this is good news because everyone is working together to solve the problem of finding skilled and educated people to keep a manufacturing company alive and well – and, rooted in Kentucky!

Kentucky Tech students are now required to take the WorkKeys® test as a senior. This National Career Readiness Certificate (NCRC) represents the new measure of education excellence at the high school level and provides a job skills assessment – one that KY Tech students in welding, sheet metal, auto body repair, machine tool technology and industrial maintenance technology programs can use to be accepted into the Mazak apprenticeship program because they accept this as a recognized credential. This is a testament of how Kentucky Tech teachers are actively engaging students in the mastery of academic and technical skills needed to be ready for college and a career.



Good News Story #357

By: Fran Dundon

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**Office of Career and Technical Education
Education and Workforce Development Cabinet**

